



Conduction-Band

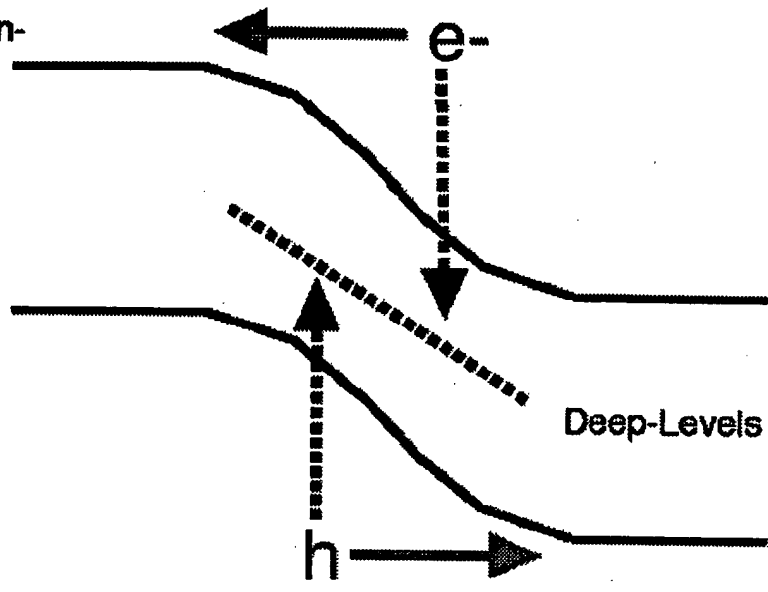
Valence-Band

Deep-Levels

P

N

Figure 1 (prior art)





Conduction-
Band

Valence-
Band

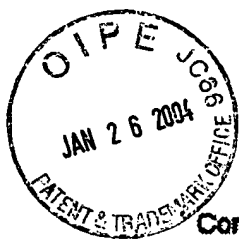
holes

electrons

P

N

Figure 2



Conduction-Band

Valence-Band

holes

Deep-Levels

Conduction-Band

Fermi-Level

electrons

Valence-Band

Schottky Contact

P

Figure 3

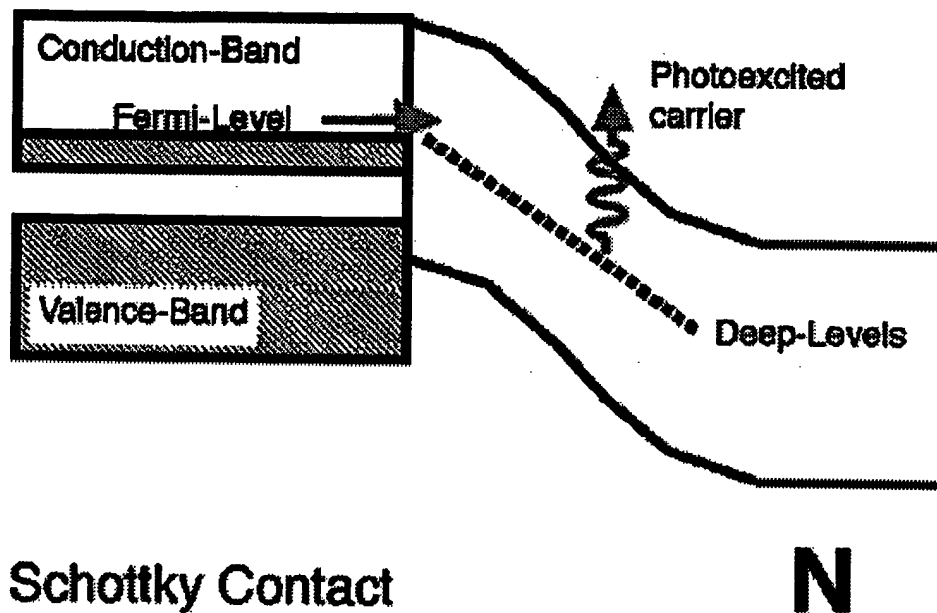


Figure 4

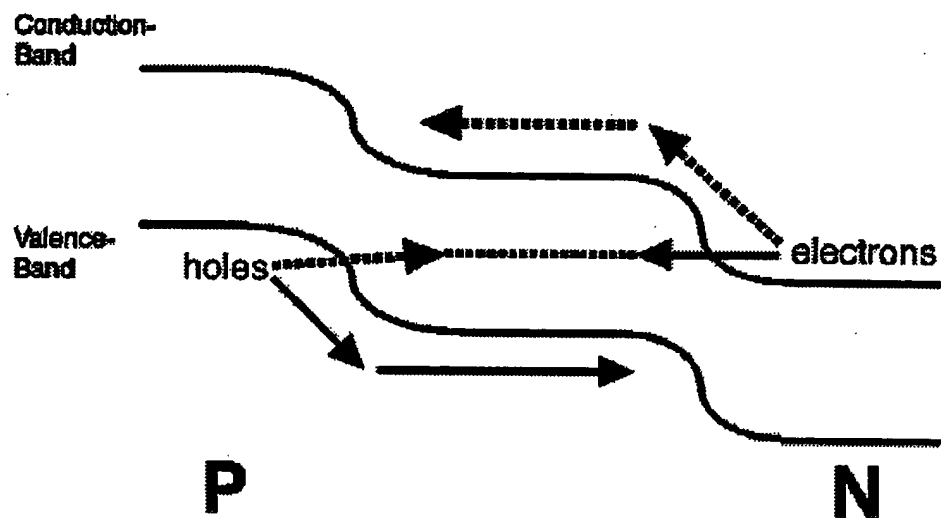


Figure 5

5

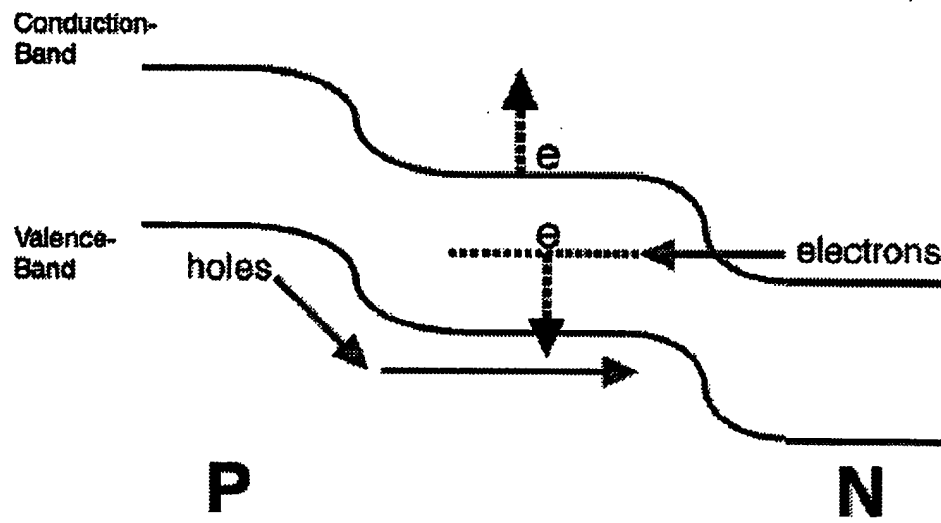


Figure 6

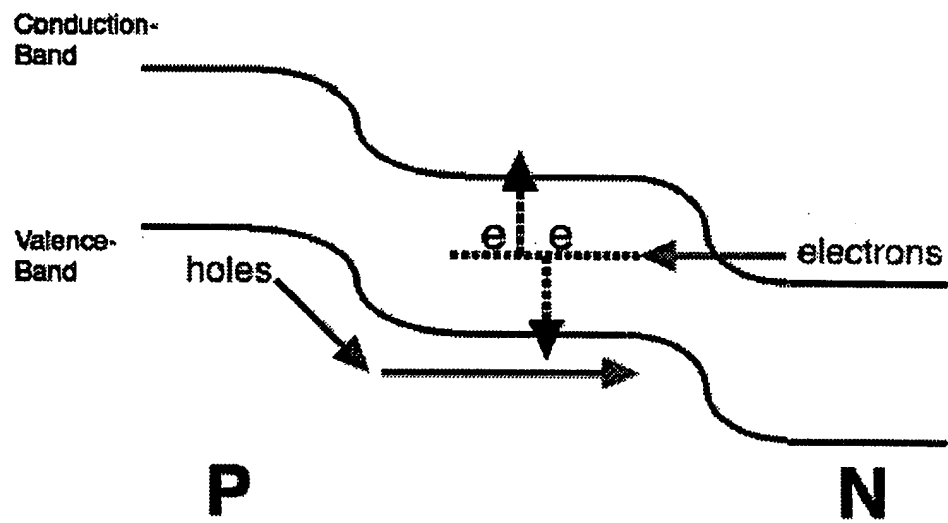


Figure 7

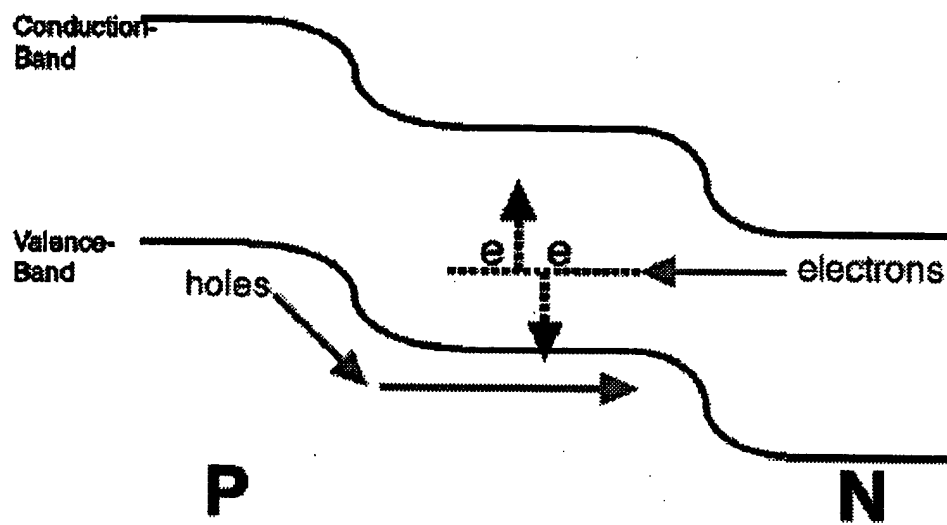


Figure 8

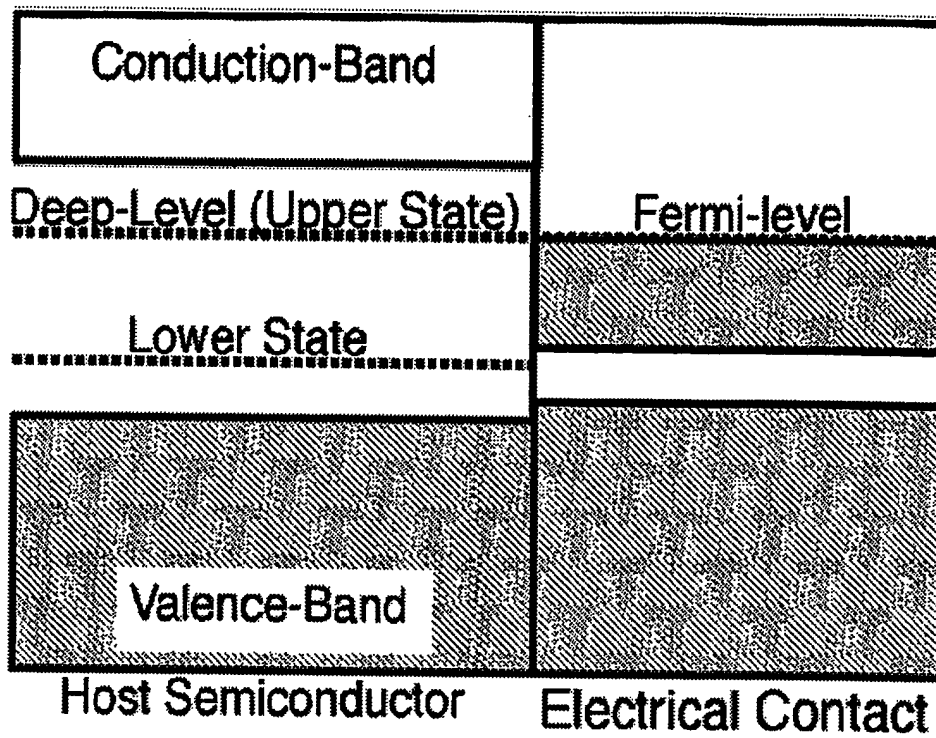


Figure 9

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10

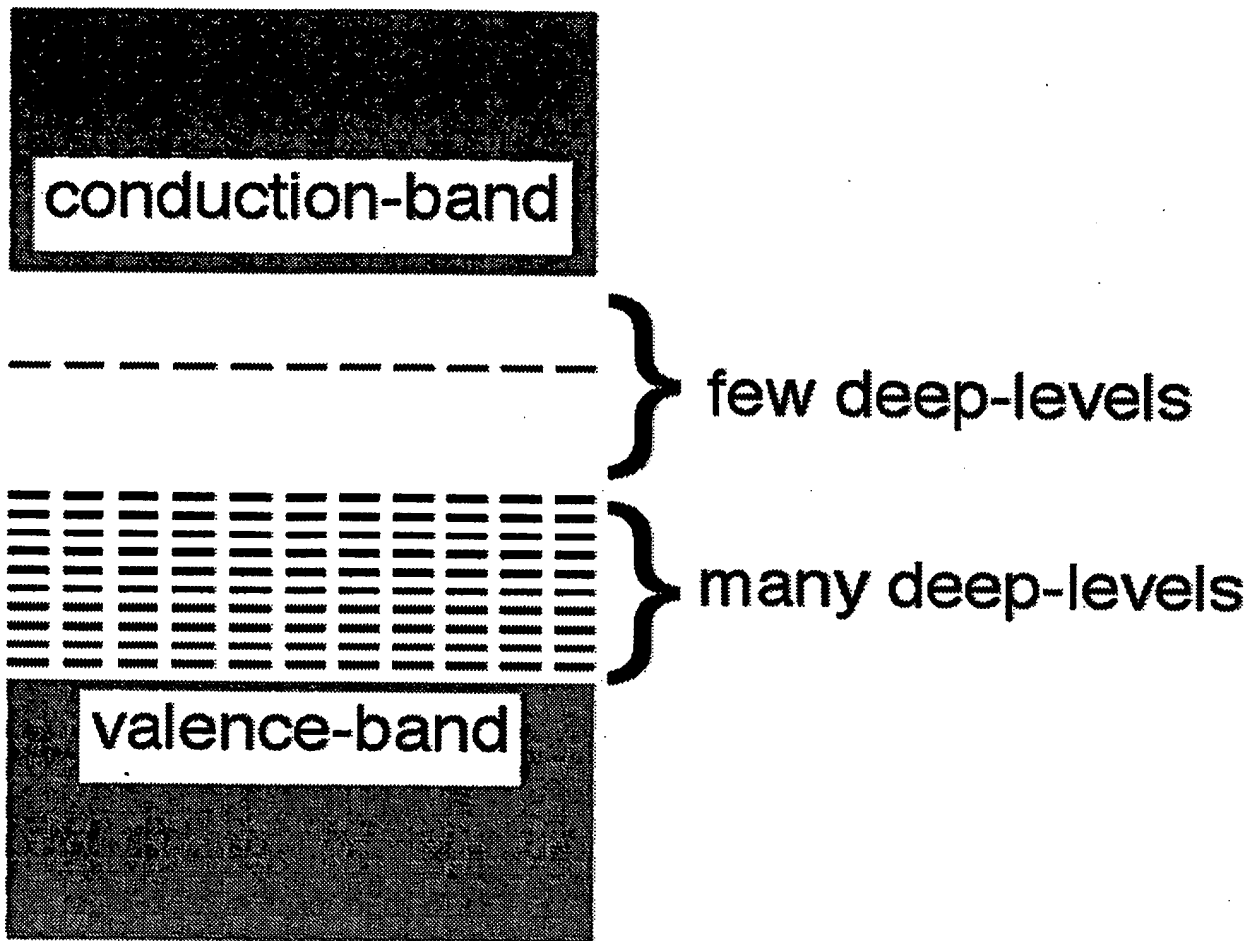


Figure 10

5

10

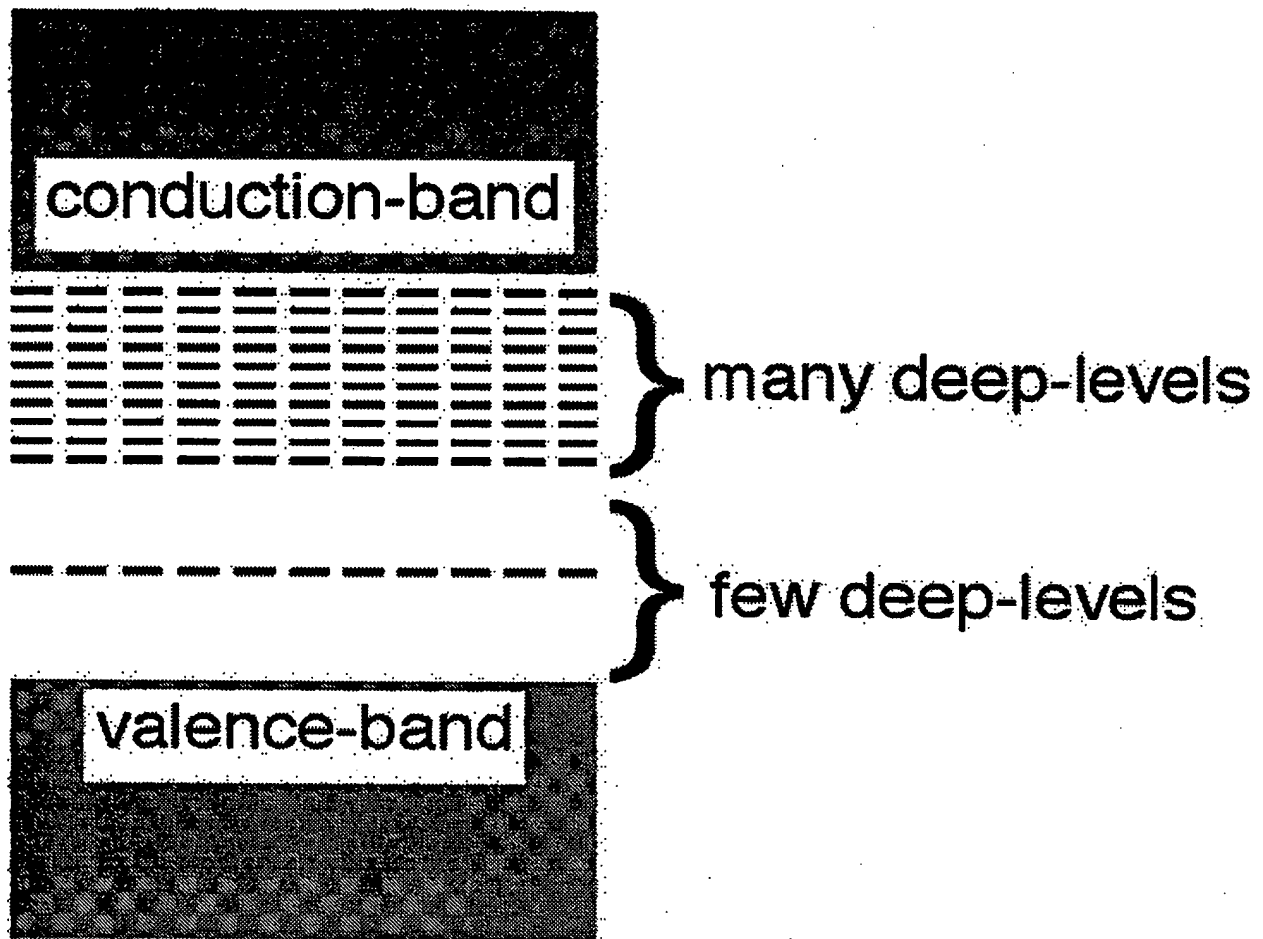


Figure 11

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10

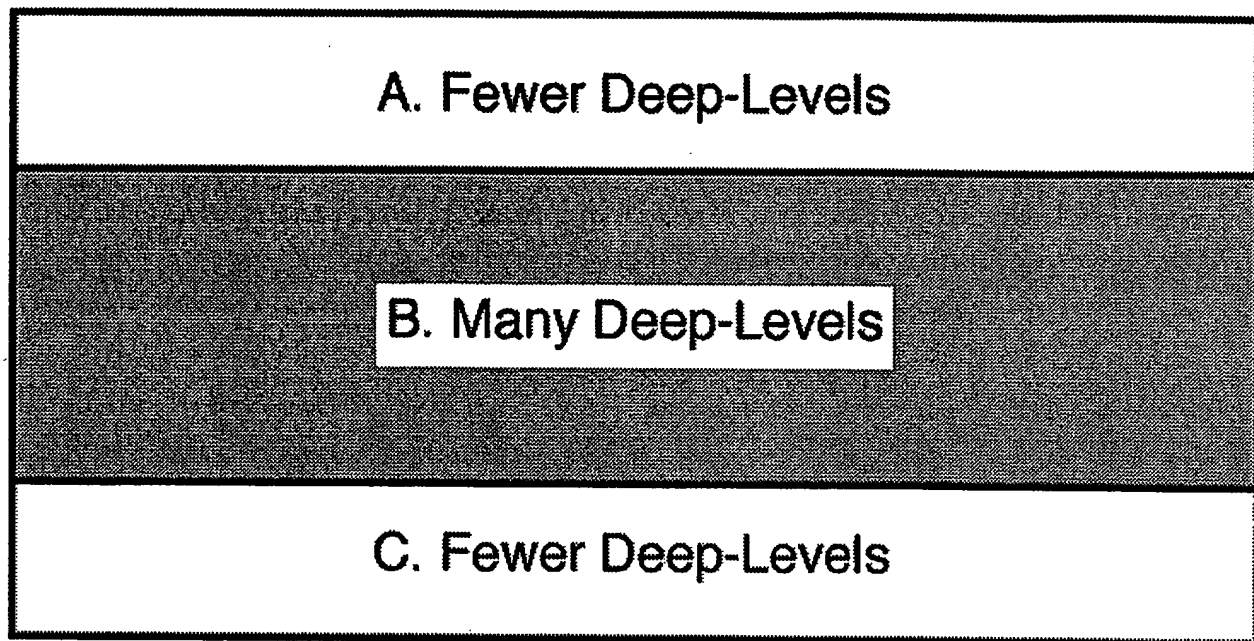


Figure 12

5

10

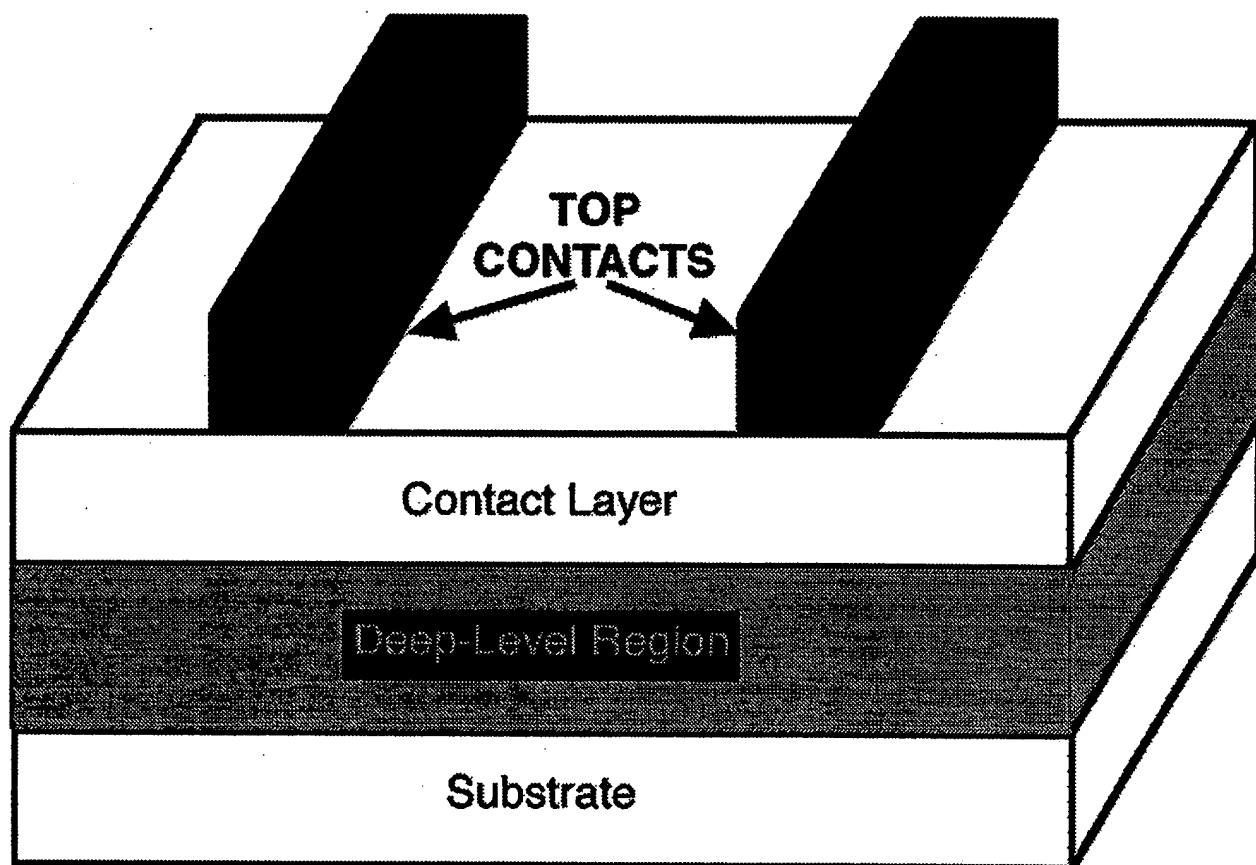


Figure 13

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10

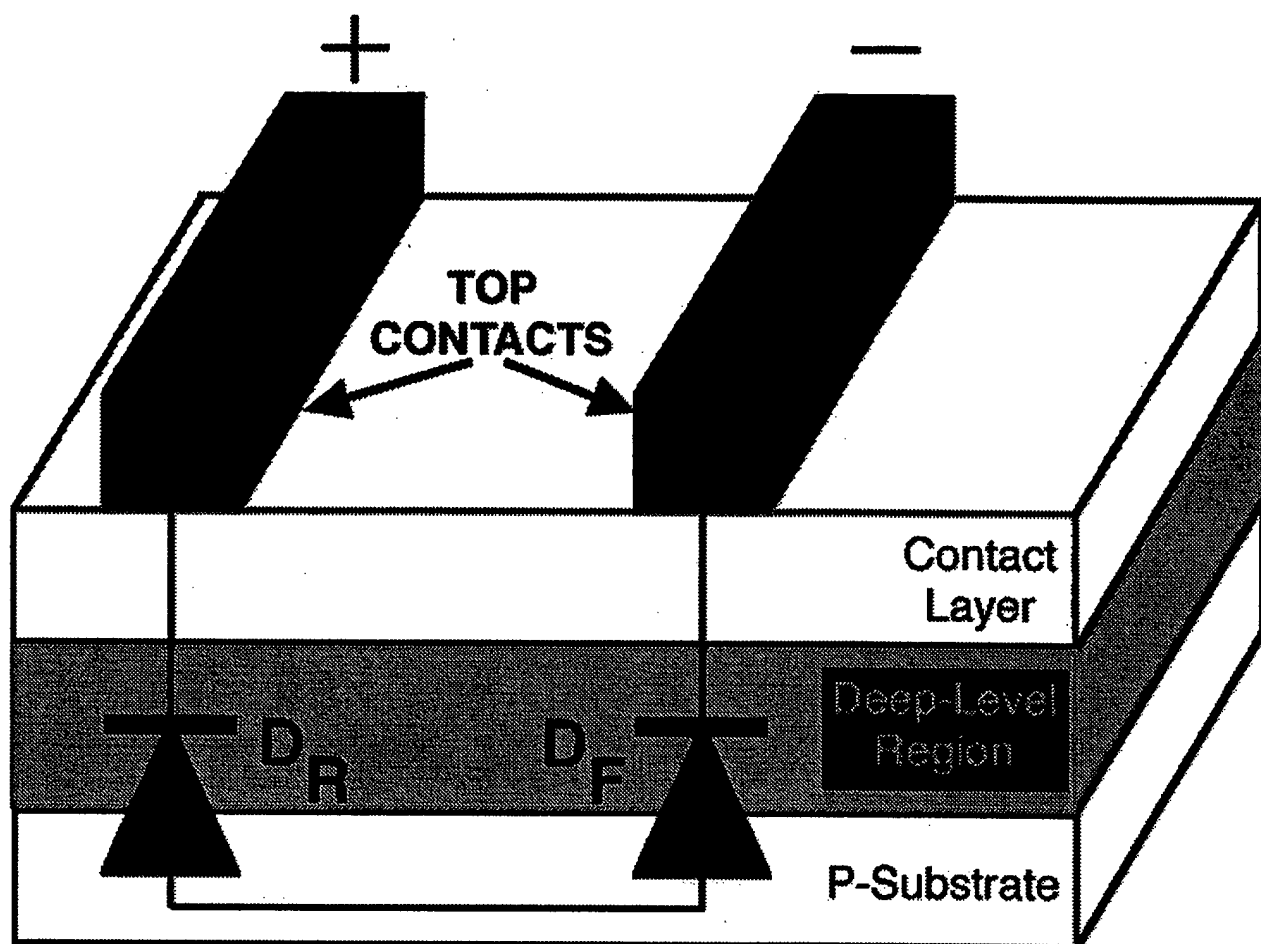


Figure 14

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10

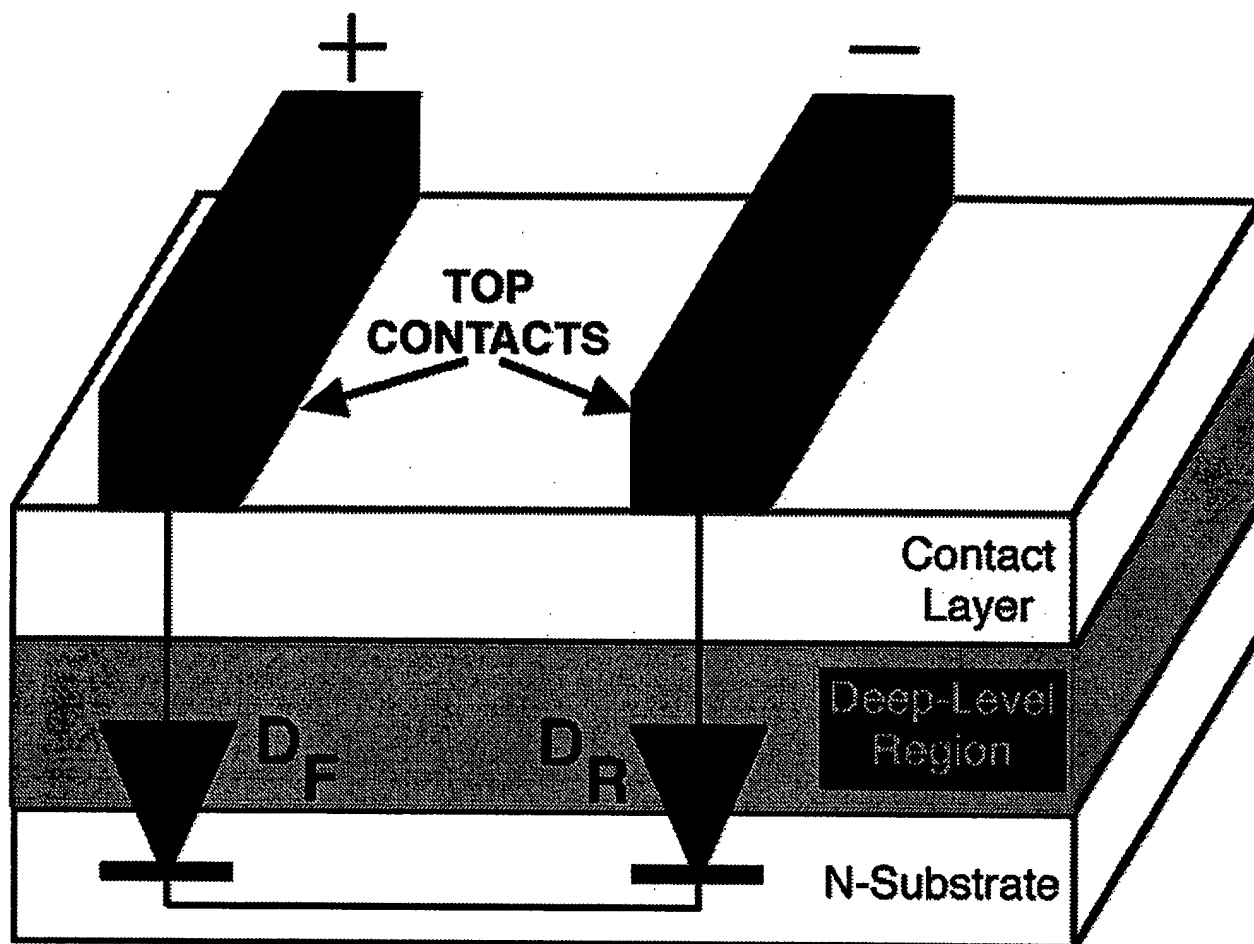


Figure 15

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10

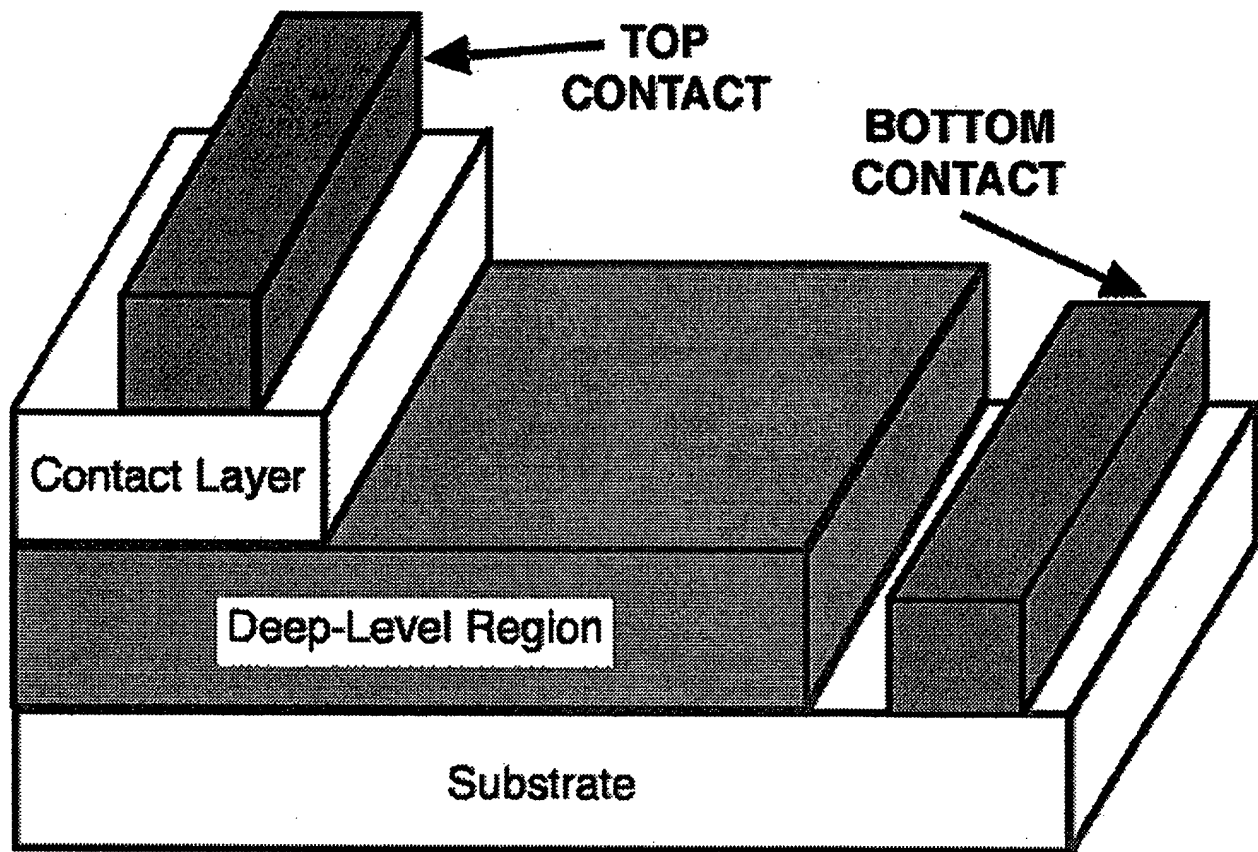


Figure 16